



Larry Goulder, Stanford University — *Chair*

Dr. Goulder is the Shuzo Nishihara Professor in Environmental and Resource Economics, a Research Associate at the National Bureau of Economic Research, and a University Fellow at Resources for the Future. Professor Goulder's research examines the environmental and economic impacts of regional, national and international environmental policies. Much of the work focuses on policies that address the prospect of climate change or that deal with local air pollution from power plants and automobiles. Other work includes construction of more comprehensive national accounting methods to better assess the long-run development prospects for various countries; and analysis of "green tax reform" – revamping the tax system to introduce taxes on pollution and reduce taxes on labor effort or investment. Prof. Goulder graduated from Harvard College with a B.A. in philosophy, and earned his Ph.D. in economics from Stanford University.

Justin Adams, Chang & Adams Consulting

Justin is a Director at Chang & Adams Consulting, a Sacramento-based consulting firm that applies cutting-edge quantitative analyses to help frame and solve issues pertaining to public policy and business strategy. From 2007 to 2009, Justin was the Director of Economics at the consulting firm Forward Observer. From 2001 to 2007, Justin was an economist at the RAND Corporation, specializing in domestic and economic development, international development, defense economics, and the economics of public-sector organizations. Prior to this, Justin served as staff economist in the California Governor's Office of Planning and Research, as Assistant for Policy Development for the California Department of Housing and Community Development, and as Special Assistant in the California Department of Transportation. During his graduate studies, he spent a year conducting dissertation research as a Public Affairs Fellow at the Hoover Institution. Justin received his Ph.D. in Political Economics from the Stanford Graduate School of Business in 2000. He also earned his A.M. in Political Science and his A.B. in Economics and Political Science from Stanford University.

Vicki Arroyo, Georgetown State and Federal Climate Resource Center

Ms. Vicki Arroyo is the Executive Director of the newly launched Georgetown State and Federal Climate Resource Center based at Georgetown University Law Center where she is also a Visiting Professor. She serves on the National Academy of Sciences committee and on the advisory council to the National Center for Atmospheric Research. She previously served at the Pew Center on Global Climate Change, most recently as the Pew Center's Vice President of Domestic Policy and General Counsel. Since 1998, she directed the Pew Center's domestic program, environmental impacts and economics programs. Previously, she practiced environmental law with Kilpatrick Stockton and served in two offices at the U.S. EPA -- working on air pollution standards and in senior environmental posts in Louisiana under then-Governor Roemer. She holds a B.S. in biology, Magna Cum Laude, from Emory, an MPA from Harvard (top honors in program), and a J.D., Magna Cum Laude, from Georgetown where she was Editor In Chief of the Georgetown International Environmental Law Review.

Matthew Barger, Hellman & Friedman LLC

Mr. Barger is a Senior Advisor at Hellman & Friedman LLC. He formerly served in a number of roles in the Firm including managing general partner and chairman of the Investment Committee. Mr. Barger's primary area of focus has been asset management. He was instrumental in the Firm's investments in Artisan Partners, Brinson Partners, Farallon Capital Management, Franklin Resources and Mondrian Investment Partners. Prior to joining the Firm in 1984, Mr. Barger was an Associate in the Corporate Finance Department of Lehman Brothers Kuhn Loeb. Mr. Barger graduated from Yale University Magna Cum Laude with distinction in the major in 1979, and the Stanford Graduate School of Business in 1983, where he was an Arjay Miller Scholar. Mr. Barger also serves as a director of the San Francisco Free Clinic and the USA Cycling Development Foundation, and is a member of the California Public Employees Post Employment Benefits Commission.

James K. Boyce, University of Massachusetts, Amherst

Dr. Boyce is a professor of economics at the University of Massachusetts, Amherst, and director of the environment program at the Political Economy Research Institute. He received his B.A. from Yale University and his doctorate from Oxford University. His books include *The Political Economy of the Environment* (2002), *Natural Assets: Democratizing Environmental Ownership* (2003), and *Reclaiming Nature: Environmental Justice and Ecological Restoration* (2007).

Dallas Burtraw, Resources for the Future

Dr. Burtraw, a Senior Fellow at Resources for the Future, conducts research on the design of environmental regulation, the costs and benefits of environmental regulation, and the regulation of the electricity industry. Dr. Burtraw recently investigated the effects of emissions trading to achieve carbon dioxide reductions on the performance of the electricity sector, and has also advised state and regional efforts. Dr. Burtraw has evaluated the use of emission trading to achieve carbon emission reductions in the EU, the cost-effectiveness of trading programs for nitrogen dioxide in the eastern United States and sulfur dioxide trading programs under the Clean Air Act Amendments. Dr. Burtraw has recently studied the distributional consequences of cap-and-trade programs for reducing carbon emissions. He also recently contributed to the valuation of the

benefits of ecological improvements due to reduced acidification in the Adirondacks and Southern Appalachian Mountain Region. Dr. Burtraw earned a Ph.D. in economics and an M.A. in public policy from the University of Michigan, and a B.S. from the University of California, Davis.

James Bushnell, University of California Energy Institute

Dr. Bushnell is the research director at the UC Energy Institute and a lecturer at the Haas School of Business. Dr. Bushnell's research interests are industrial organization and regulation, environmental economics, energy policy and game theoretic optimization models. Dr. Bushnell is a fellow of the National Bureau of Economic Research, member of the Market Surveillance Committee for the California ISO, and is an associate editor of *Operations Research*. Dr. Bushnell formerly served as a member of the Market Monitoring Committee for the California Power Exchange and worked for the PUC. Dr. Bushnell graduated from the University of Wisconsin, Madison with a B.S. in Industrial Engineering and earned his Ph.D. in Industrial Engineering and Operations research from University of California, Berkeley.

Robert Fisher, Gap Inc.

Mr. Fisher is a member of the Board of Directors of Gap Inc., and the former chairman and interim CEO. From 1980 to 1999, he served in various operating roles at the Company including president of Gap brand and executive vice president and CFO of Gap Inc. He has been a director there since 1990. Born and raised in San Francisco, Mr. Fisher attended Phillips Exeter Academy (1972) and Princeton University (1976) where he received a B.A. in English Literature. He received his MBA from Stanford Business School in 1980. Mr. Fisher is on the board of trustees for the Natural Resources Defense Council (NRDC), where he is Vice Chairman, Conservation International where he chairs the executive committee, and the San Francisco Museum of Modern Art.

Richard Frank, California Center for Environmental Law & Policy

Mr. Frank is Executive Director of the Center for Law, Energy & the Environment (CLEE) at the University of California, Berkeley School of Law. Mr. Frank, who joined the U.C. Berkeley Law School faculty in 2006, also serves as a lecturer in residence at the law school, where he teaches courses in environmental law and climate change. Before coming to CLEE and U.C. Berkeley, Mr. Frank practiced law with federal and state agencies for 32 years, most of that time with the California Department of Justice. Immediately before joining Berkeley Law, he served as California's Chief Deputy Attorney General for Legal Affairs. In 2006, Governor Schwarzenegger appointed Mr. Frank to the Delta Vision Task Force, an advisory body asked to develop policy recommendations for the Governor and Legislature, addressing environmental problems confronting the California Delta. He served in that capacity in 2007-08. Mr. Frank earned a J.D. from the U.C. Davis School of Law, and a B.A. from U.C. Santa Barbara.

Dan Kammen, University of California, Berkeley

Dr. Kammen is the Class of 1935 Distinguished Professor in the Energy and Resources Group, the Goldman School of Public Policy, and the Department of Nuclear Engineering at the University of California, Berkeley. Prof. Kammen is the founding director of the Renewable and Appropriate Energy Laboratory, and director of the Transportation Sustainability Research Center, both at U.C. Berkeley. Dr. Kammen's research and public

engagement is focused on the science, engineering and policy of low-carbon energy systems, and on national and international energy and climate programs and policy. He is a member of the Intergovernmental Panel on Climate Change, which shared the 2007 Nobel Peace Prize. Prof. Kammen earned his Ph.D. and M.A. in Physics from Harvard University and a B.A. in Physics from Cornell University.

Christopher R. Knittel, University of California, Davis

Dr. Knittel joined the faculty at U.C. Davis in 2002, having taught previously at Boston University from 1999 to 2002. In 2008, Prof. Knittel was one of five faculty members at U.C. Davis named as a Chancellor's Fellow. Prof. Knittel is a research associate at the National Bureau of Economic Research in the Productivity, Industrial Organization and Energy and Environmental Economics groups, a visiting research associate at the University of California Energy Institute and a faculty associate of the Institute of Transportation at U.C. Davis. Prof. Knittel is an associate editor of the American Economic Journal -- Economic Policy, the Journal of Industrial Economics and Journal of Energy Markets. Prof. Knittel earned his B.A. in economics and political science from the California State University, Stanislaus in 1994 (summa cum laude), an M.A. in economics from U.C. Davis in 1996, and his Ph.D. in economics from UC Berkeley in 1999.

Stephen Levy, Center for the Continuing Study of the California Economy

Mr. Levy is Director and Senior Economist of the Center for Continuing Study of the California Economy (CCSCE) in Palo Alto. CCSCE is a private research organization founded in 1969 to provide an independent assessment of economic and demographic trends in California. CCSCE works with public institutions and private companies that require an explanation and analysis of California growth trends including detailed projections. Mr. Levy is the principal author of CCSCE's annual report series on the California economy. CCSCE's annual reports have acquired a national reputation for credible and independent analyses. Mr. Levy has degrees in economics from MIT and Stanford University.

Joe Nation, Stanford University

Dr. Nation directs the graduate student practicum in public policy at Stanford University, where he teaches climate change, health care policy and public policy. He is also a principal at Climate Action Partners, where he provides carbon advisory services, decarbonization project development and management, offset portfolio management, community renewable energy assessment and data analysis for multiple clients. He represented Marin and Southern Sonoma Counties in the California State Assembly from 2000-2006. During his tenure, Nation authored nearly 50 bills that were enacted into law. Nation was the principal co-author of AB 32, California's Global Warming Solutions Act. He earned a B.A. in Economics, German and French at the University of Colorado, and subsequently an M.A. in Foreign Service from Georgetown University, where he graduated with honors. In 1985, Nation was one of twelve students nationwide to be accepted at Pardee RAND Graduate School, where he received a Ph.D. in Public Policy Analysis.

Nancy E. Ryan, California Public Utilities Commission

Dr. Ryan is an economist with expertise in energy markets and the public health and ecological impacts of energy production. She currently serves as Deputy Executive Director for Policy and External Relations at the California Public Utilities Commission, where she directs policy initiatives in the areas of long term energy

procurement, resource adequacy and climate change policy. Before joining the CPUC in 2006, she was senior economist and deputy California director at the Environmental Defense Fund, where she led advocacy efforts focusing on reducing greenhouse gas emissions from vehicles and power plants, curbing air pollution from diesel engines and restoring rivers and watersheds. Previously, Dr. Ryan worked as a consultant in the energy efficiency field and taught courses in economics at the University of British Columbia. She also taught at U.C. Berkeley's Goldman School of Public Policy for over a decade. Dr. Ryan received her Ph.D. in Economics from the University of California, Berkeley and a B.A. in Economics from Yale University.

Nancy Dayton Sidhu, Los Angeles County Economic Development Corporation

Dr. Sidhu is Chief Economist in The Kyser Center for Economic Research of the Los Angeles County Economic Development Corporation. The LAEDC is a private, non-profit organization dedicated to assisting business firms and fostering job growth in Los Angeles County. Dr. Sidhu forecasts national and regional trends and analyzes developments in the key industries of Southern California. Just prior to joining the LAEDC, Dr. Sidhu was a senior economist for Bank of America, specializing in the analysis of the Southern California region as well as the metals and other manufacturing and service industries. In earlier years, Dr. Sidhu served as an Associate Professor of Economics at Northeastern Illinois University in Chicago, teaching economics and statistics. Then she worked at Inland Steel Industries as an industry economist and corporate planner, analyzing metal-using industries, supplier industries, and the steel industry itself. Moving to Los Angeles, she worked at the U.S. headquarters of Toyota Motor Sales before joining Security Pacific National Bank as economist to prepare the Bank's U.S. economic forecasts. Dr. Sidhu received her B.A., M.S., and Ph.D. degrees in Economics from the University of Illinois at Urbana-Champaign. Active in her profession, Dr. Sidhu chairs the Economic Advisory Council of the California Chamber of Commerce. She is an Associate Editor of the quarterly Business Economics published by the National Association for Business Economics (NABE). She also has served terms as President of the Chicago and Los Angeles chapters of the NABE.

James L. Sweeney, Stanford University

Dr. Sweeney is director of the Precourt Energy Efficiency Center; professor of Management Science and Engineering; senior fellow of the Stanford Institute for Economic Policy Research; senior fellow of the Hoover Institution on War, Revolution and Peace; senior fellow of the Freeman Spogli Institute for International Studies; and senior fellow of the Woods Institute for the Environment. At Stanford, Prof. Sweeney has served as chairman of the Department of Engineering-Economic Systems, chairman of the Department of Engineering-Economic Systems and Operations Research, director of the Energy Modeling Forum, chairman of the Institute for Energy Studies, and director of the Center for Economic Policy Research (now the Stanford Institute for Economic Policy Research). Prof. Sweeney is a senior fellow of the U.S. Association for Energy Economics, a lifetime National Associate of the National Academies, a council member and senior fellow of the California Council on Science and Technology, a member of the International Advisory Council of the National Renewable Energy Laboratory, and a member of Governor Schwarzenegger's Council of Economic Advisors. Prof. Sweeney earned his B.S. degree from MIT in electrical engineering and his Ph.D. from Stanford University in engineering-economic systems.